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RAYMOND DODGE, YALE UNIVERSITY (*Monographs*)

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THE PSYCHOLOGICAL BULLETIN

LEGAL PSYCHOLOGY

A BIBLIOGRAPHY AND A SUGGESTION

BY DONALD SLESINGER AND E. MARION PILPEL

Yale University

Coöperative or border-line research presents many problems which, in the field of legal psychology, have not yet been solved. There is a naïve assumption on the part of psychologists and lawyers that, in the field less well-known to the investigator, results exist that can be readily applied to his own. The lawyer translates into behavioristic terms certain concepts elaborated in his own discipline as though the translation were a scientific contribution. The psychologist develops deception tests in a laboratory and passes them on as though they had immediate practical value in the court room situation. Psychiatrists, with equal faith in what law can do if it will, plead for examination of everyone who comes in contact with the court.

Little seems to be gained by calling "offer and acceptance" "stimulus and response." Little more is gained by trying to apply results of delicately refined reaction time experiments to court situations. Such experiments may show that it usually takes slightly longer to lie than to tell the truth, but it takes so little longer that the speediest so-called spontaneous exclamation in court is far longer than the slowest lying time in the test. It is clearly unsafe to instruct the court on the basis of the reaction time experiment. Measurements of emotion as indications of deception are also of dubious value. On the face of it, and from a purely laboratory standpoint the psycho-galvanic reflex, so completely out of the control of the subject, would seem to be an ideal indication of truth or falsity. Unfortunately the court room situation itself, even where

an entirely innocent person is concerned, is quite likely to throw out the delicately adjusted galvanometer. This lack of familiarity with the problems of study, and the sort of result that might be made use of implies a vagueness in the definition of the field.

From the mass of titles selected for this bibliography and the equally large mass left out of it, it would be difficult to define legal psychology. Both psychologists and psychiatrists have taken the most spectacular part of jurisprudence, the court room and crime, as the sum total of the law. An occasional departure from the general conception of legal psychology is taken by legal writers, who, like Patterson, want some light thrown on obscure legal problems from the laboratory science. The selection on the part of psychologists was made according to their background and training. The lawyers were bolder in their general outlook, but essentially naïve in the matter of coöperation.

If, instead of defining legal psychology as that which is written about law by psychologists or about psychology by lawyers, we attempt to frame a more rigorous definition, it may throw some light upon the subject-matter and the methods by which that subject-matter should be studied. Legal psychology may be defined as the behavior of people in situations created by the law, or the behavior of people in legal relations. Assuming that as a definition we find the behavior of judges as important to the science as the behavior of criminals, and the behavior of normal people entering into contracts as important as the perjurer on the stand. It may be that this definition will make coöperation with a laboratory science difficult, and force us to fall back on the less precise methods of psychiatry and anthropology. If that be true the situation must be faced and a technique developed that is very much a part of the questions we wish to have answered.

A cursory survey of the titles listed in the appended bibliography will make clear the need of a subject-matter and a method. Roughly divided there are in the present bibliography twenty-eight psychiatric titles, forty-two sociological, forty-six legal and forty-eight psychological articles. The classification of the articles into these four groups is necessarily approximate and somewhat subjective, but it will serve to bring out the principal points of view represented and the proportionate emphasis upon each of them.

Despite the relatively large number of articles (about 46) written from the legal point of view, their contribution to legal psychology

appears disappointingly small. The general lack of psychological experiments, statistical data, or even of detailed psychological analysis is very evident in this group of the literature. The legal articles are usually either narrow in scope or else naïve and based upon a popular and misunderstood psychology. There are, however, a few thorough and pertinent criticisms (especially those by Wigmore and by McCormick) of the attempts that have been made to apply psychological tests in court.

In the psychological group of articles, experiment and statistics play a far larger rôle, considerably larger than in any of the other three groups. We have on the one hand fairly numerous accounts of experiments (psychological and physiological) on deception tests (Larson, Marston), and on testimony (Marston, Pfahler) and, on the other, statistical studies like those of Murchison on the correlation of criminality with intelligence, sex, race, etc. The psychological group of articles is the most scientific, but perhaps the least practical. Its experiments are laboratory experiments, related to legal situations, so to speak, by marriage only.

Most of the articles listed as sociological deal with juvenile delinquency and crime prevention and have a distinctly practical slant. A good many of them are statistical analyses of the subsequent careers of juvenile and adult offenders. Since it is impossible in the limited space allowed to attempt a detailed criticism, it may be suggested in passing that often the statistics are "popular" in the worst sense of the word. It is always tempting to use figures; it is seldom realized that the assigning of numerical values to non-quantitative material is likely to be misleading.

The psychiatric articles suffer most from vagueness. Too many of them are, as noted above, simply pleas for the psychiatric examination of all prisoners or for other forms of coöperation; or programs of procedure that represent a pious future hope. There are a few detailed psychological and psychoanalytical analyses of individual offenders, however, such as the article by Bonaparte on the Lebre case, by Bridgeman on "Four Young Murderers," and by Ferri on Violet Gibson, the assailant of Mussolini.

An examination of the methods of legal and psychological research should certainly introduce a note of skepticism, at least into the mind of the critic. It is unnecessary to discuss psychological methods in this periodical, but it might be illuminating to set forth some of the ways in which lawyers or students of jurisprudence

arrive at their conclusions. When a particular problem comes up for investigation, the law student does not go into the field or the laboratory, but, by means of the most marvelous cross-indexed system in the history of thought, he goes directly to past decisions. The recorded decisions refer to the relatively small number of cases that have been appealed. The appellate judge has not the advantage of having lived through the dramatic incidents of the trial. His decision is made for the most part on the basis of a written brief and the learned arguments of counsel. He may be considering, for example, whether a certain statement made out of court not under oath may have come close enough to a sudden emotional disturbance to be heard in court as a spontaneous exclamation. These exclamations are admitted under an exception to the hearsay rule on the theory that they followed so closely upon the events they describe that the narrator had no time to invent a lie. Judges are not trained introspectionists so we can only guess roughly at what goes on in the mind of one faced with a necessity of deciding this rather delicate matter. He compares the present situation with other cases, and finds that statements coming anywhere from a few moments to a good many hours after the offense are admitted as part of the testimony. He takes no statistical average, but tries to find at least one case sufficiently similar to his to be used as a basis for decision. Failing to find one he may ask himself how much he would have been upset by the accident or other type of emotion-evoking event, and how long it would have taken him to have recovered his sang-froid sufficiently to be able coolly to invent a lie. At best this is the method of common sense checked by the common sense of other judges in quite dissimilar situations. From the standpoint of deciding a particular case the method seems to be sound, but it is far from precise science.

The fact that the result of legal analysis of case material is not precise science does not make the result of less value to legal psychology. Indeed, in the rough and ready generality of legal research and the greater precision of psychological investigation, we may have a solution of the problem under discussion. A science requires a subject-matter and a method; perhaps legal scholarship will supply the one, psychological research the other.

That would mean that the first step in the development of legal psychology should be a logical and psychological analysis of legal situations. For a long period of time judges have acted, in their

decision, on unexpressed assumptions. Frequently those assumptions are in the political field having to do with such concepts as liberty. Just as frequently, the assumption is about human behavior and the original observation may be very remote. A case in point is flight which may be offered as evidence of guilt, because "The wicked flee when no man pursueth." The preliminary analysis is the job of the lawyer and the logician, and the result will not be scientific fact, but hypotheses, which, when scientifically tested, may become facts. When the analysis is made the student of behavior may step in, and not, as in the past, to coördinate the results of his study with that of the legal student, but to devise methods of investigating the behavior hypotheses elaborated in a different field. That is no new task for the psychologist; he has already done it in the field of education with great success.

Just what is selected as the behavioristic jumping-off place ("behavioristic" being used in a nontechnical sense) will depend upon the interest of the individual investigator. The subject of study to be suggested and the method by which that study may be made reflect in the present instance a purely personal interest. So much of Anglo-American law is made by judges that their behavior would seem to be a particularly important subject of investigation. Many popular hypotheses have been elaborated by modern legal students under the influence perhaps of modern biography. We hear again and again that prejudiced decisions which form precedents for future decisions are based on personality problems, economic and social philosophy, et cetera. A few more scholarly attempts have lately been made, but mostly in the historical field. A series of decisions of well-known judges is being analyzed in the light of what is known of their personal history. This method of approach is, of course, fraught with danger and in the end, may be merely productive of more hypotheses somewhat different from those developed by students of law. We are on safer ground when we test some of these hypotheses by current observation.

We are now in a peculiarly difficult field of social psychology. Our subject cannot be transplanted to a laboratory for study without destroying the total situation in which he finds himself on the bench. Setting up analogous situations with other subjects in the laboratory is an unsafe procedure. We may, therefore, properly confine ourselves to developing scientific methods of observation, while our subject is in action and unconscious of being observed. We are

particularly fortunate in our selection because the circumstances of the case keep the judge continuously under observation in one place for a period of several hours at a time.

No techniques of observation having been developed in this field we must turn to similar studies in other fields in order to develop our techniques. Up to the present the most important methods of observing social behavior have been evolved in the child development field, the work of Dr. John Anderson of Minnesota and Dr. Dorothy Thomas of Teachers' College being perhaps outstanding. The work of Dr. Thomas gives us perhaps the best clue as to the type of procedure to be employed.

Working with a nursery school group she attempted to test some hypotheses developed in case studies by observation in a social situation. Assuming that the situation could not be controlled without destroying it she set about to control the human instrument of observation. Her problem became one of finding out what significant behavior units could be reliably observed by a worker who was not indoctrinated. Diary records of the behavior of a single child for a definite period of time proved to be highly unreliable, the reports of different observers not being in agreement. The behavior units were more and more narrowly defined until some were found about which there was a minimum amount of disagreement among several observers. In one case the behavior unit was a physical contact with a person or a thing. In general the criteria used were as follows: only those behavior items were included which (a) could be accurately and consistently recorded by a number of observers; (b) in which there was a range of individual variation within the group studied; (c) the units were selected in the first instance in accordance with an *a priori* probability and significance as shown by case history and general analysis; (d) which were recurrent in various behavior situations. The data thus obtained may be slight, but they will be genuinely quantitative.

Applying this technique to a study of judicial behavior it is clear that we must proceed in a very elementary manner indeed. It will be helpful to start with the hypotheses of legal students and develop a set of rigidly defined behavior units that can be reliably observed. The aim would be to study behavior sequences in a very narrowly restricted field. It is possible to make numerous observations in this manner of the behavior of individual judges, or taking a specific behavior sequence, to study it in a number of

different judges who are easily accessible. In many cases we are fortunate enough to have a group of judges acting together in the same situation.

The lines indicated in this article are merely suggestive and based on research in prospect rather than research already accomplished. Systematic analysis of the gross behavior of people in legal situations is the important first step. The testing of hypotheses, uncovered by this analysis either in the field of judicial behavior or any other, is the next indicated step. This unpopular, unspectacular research needs encouragement because it is fundamental but exceedingly slow in coming to fruition.

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The reader is referred to Kuhlmann's "A Guide to Material on Crime and Criminal Justice," 1929, cited in the bibliography, for further references on legal psychology in general. The best bibliography on the psychology of testimony appears to be that in Gorphe's book. For older literature on this subject the reader is referred to the yearly articles on it by G. M. Whipple in the *PSYCHOLOGICAL BULLETINS* for 1909-1917 inclusive. These articles contain, in all, over one hundred references. There is also an old bibliography of fifty-six titles on the psychology of testimony collected by the German authority, William Stern, in "Bibliographie zur Psychologie der aussage, 1908-1910," *Ztschr. f. angewandte Psychol.*, 1911, IV, pp. 378-381. Whipple and Stern are, of course, both psychologists, and survey the material from an angle essentially psychological.

It has been attempted to make the present bibliography as complete as possible back through 1926. This list, when taken in conjunction with the bibliographies of Kuhlmann, Gorphe, Whipple, and Stern, includes the important work that has been done on the subject of legal psychology.

SPECIAL REVIEWS

KÖHLER, W. *Gestalt Psychology*. New York: Horace Liveright, 1929. 8vo. Pp. x+403.

The present volume from the pen of the director of the Institute of Psychology in Berlin is unquestionably a work of the first magnitude. Its importance derives not so much from the factual contributions which it makes to psychology as from a certain liberalism of speculation for which it paves the way at a time when in certain quarters the rigidities of introspection and the intolerance of behaviorism were threatening to stifle free discussion of theory. In a science as young as psychology, in which the extent of the unknown far exceeds that of the known, the hardening of concepts is unfortunate, for it means that the surest supports against stagnation, *viz.*, fluidity of opinion and readiness to exchange one hypothesis for another, have been weakened.

Professor Köhler asserts flatly in the preface that "*Gestalt* psychology . . . resembles in 1928 a promising start more than a complete achievement." If by "complete achievement" is to be understood the construction and presentation of an hypothesis under which may be subsumed most of the known facts which fall within the subject-matter under consideration (such, *e.g.*, as Wundt's psychology purported to be) then, most certainly, *Gestalt* psychology is incomplete. The phrase, and the smile, with which Santayana introduced a recent volume, "Here is one more system of philosophy," cannot be said to characterize Köhler's work, for *Gestalttheorie*, as outlined in the present book, is not a *system* of psychology. Too many well-known psychological phenomena (feeling and emotion, *e.g.*) are left completely untouched.

The salient features of Köhler's views are presented in ten chapters, all written in essay-form and each one perfectly self-contained, yet all held together by a sort of fugal theme which divides at times into four or five parts. The style of writing is a delight. "I have done all that I possibly could," pleads Köhler in apology for what seemed to him the inadequacy of his skill with a foreign language. Would that a few American psychologists had half the grace and lucidity in their use of English that Köhler appears to summon with so little effort!

Chapter I. The Viewpoint of Behaviorism. All science has a single starting point: the world as given in naïve uncritical experience. Certain branches of science long ago singled out special aspects of direct experience which seemed to serve uniformly as reliable signs or symbols of an indirect or mediate world of experience,—the “real” or “objective” world of the physicist. To psychology alone, apparently, belonged the task of exploring the more unruly or “subjective” aspects of direct experience. Behaviorism has argued, however, that psychology, too, must forsake the world of direct experience and occupy itself only with “objective” events. In answer to behaviorism it must be pointed out that it simply is not true that the so-called natural sciences have no traffic with direct experience. Hence the difference between the natural sciences and mental sciences cannot be ascribed to any difference in “objectivity” or “subjectivity” of subject-matter. Furthermore, the behaviorist, in his philosophizing, has seized upon one epistemological argument and totally ignored another equally important one. If, as he likes to maintain, the experience of another person can never be the object of direct observation, it is also equally true that the “real” world of the physicist is never directly observed. Yet the physicist has succeeded in getting at his indirect world. There is no *a priori* reason to assume that the psychologist may not do likewise.

Chapter II. Psychology as a Young Science. The great success of the physical sciences is due, in part, to the long time they have been at work, and, still more, to their rigid exclusion of materials in direct experience which do not lend themselves to quantitative treatment. In modern physical research direct experience is limited almost exclusively to localization of a needle-point on a scale of lines. Should psychology follow in the same direction? Yes and no. If quantitative methods are adequate to the problems under investigation they should obviously be pushed to the limit. But in a science as young as psychology and confronted with such a welter of baffling problems it should be only too clear that for much of its material no adequate quantitative methods have yet been found. To insist that qualitative observations must wait upon the perfection of quantitative technique is entirely contrary to the course of scientific development. If qualitative observation is allowed to proceed under the unhampered influence of numerous and flexible hypotheses it is not at all impossible that psychology will reap a much richer reward than it could by following slavishly the methods of physical sciences. (On page 58ff

Köhler offers certain principles for the use of direct experience in an "objective" or behavioristic experiment.)

Chapter III. The Viewpoint of Introspection. Although one would naturally consider naïve direct experience to be the peculiar property of introspection, it turns out by dint of preconceived notions about mental elements, the rejection of reports not couched in terms of these elements, rigid training in sharp distinctions between sensation and perception, the assertion that anything that smacks of "meaning" does not properly belong within the field of psychology, etc., that the subject-matter of introspection not infrequently is limited to bare sensory experience which, in turn, is assumed to follow corresponding properties of peripheral stimulation. Instead, then, of welcoming the field of direct experience as its subject-matter, introspectionism, because of its artificial restrictions and exclusions, is hardly less hostile to it than is behaviorism itself.

Chapter IV. Dynamics as Opposed to Machine Theory. Both introspectionism and behaviorism have been guilty of supporting the view that sensations and reactions reveal a point-to-point correspondence with peripheral stimulation; that whatever happens in the nervous system depends either upon inherited or upon secondary acquired topographical arrangements. To unprejudiced observation it must be clear that many psychological phenomena cannot possibly be explained in terms of such a constancy-hypothesis. To account for these phenomena *Gestalt* psychology proposes to adopt the view that the organization of behavior and of the sensory field is determined primarily by *dynamical* interaction within the nervous system of the *relative* properties of stimulation. It is to this concept of dynamical *self-distribution* that *Gestalt* psychology turns for a clearer understanding of those properties in such phenomena as constancy of size, form, localization, speed and brightness, the stroboscopic movement, and illusions, which have stubbornly refused analysis into sensory items uniformly related to the conditions of retinal stimulation. Although this view is opposed to an unqualified "mechanism" its adoption does not, however, lead one in the direction of vitalism.

Chapter V. Sensory Organization. In the sensory field appear many qualities which exhibit little relation to peripheral stimulation. These qualities, moreover, are set within contours and lines of segregation, separation, and coherence, which, again, are not the product of spatial or temporal patterns of peripheral stimulation. It is these

properties in direct experience which are comprehended in the phrase sensory organization. The products of organization are frequently referred to by names, as when one remarks that he sees before him a chair, a table, a pencil, and a cigarette. The older argument had it that these physical objects were known by use, and that the meanings thus developed were responsible for the coherence and segregation within the sensory field. *Gestalt* psychology admits freely that these objects have acquired multifarious meanings, but it refuses to admit that their sensory organization was not present before the meanings, or, in other words, that the meanings are responsible for organization. It is not necessary to know that green is used as a signal on a railroad track before one can become aware of the presence of green within the sensory field! No more is it necessary to assume that sensory data must acquire meaning before they reveal properties of organization. Plenty of instances may be given of intricate sensory organization which has no correspondence to contours of physical objects, and yet the organization is immediately perceived in its own right. Sensory organization, in most cases, is due not to *Gestalten* of physical objects nor to acquired meanings, but to dynamic conditions in the nervous system.

Chapter VI. The Properties of Organized Wholes. The problem of *Gestalt* in modern psychology began with the observation that sensory fields are replete with properties which do not fit into the scheme of concepts centered around the idea of "sensation." These properties pertain always to *extended* wholes and cannot, therefore, be the product of local or punctiform experience. When one speaks of parts of the field as simple, complicated, regular, harmonious, symmetrical, slender, round, angular, clumsy, or graceful, he obviously has reference not to isolated sensation-qualities but to the manner in which sensory stuff is moulded, patterned, shaped, and formed. Since these forms, or *Gestalten*, always present themselves as integral properties of segregated wholes, *Gestalttheorie* formulates the general theorem that real form depends upon the segregation of corresponding wholes which, in turn, are the product of dynamical self-distribution within the nervous system. The very existence of form presupposes the existence of wholes. It is easy to show that although form may be influenced by past experience, for the most part it follows principles entirely independent of any meaning-theory. *Gestalt* is also a characteristic of nonsensory experience, as

when one speaks of the starting, ending, interrupting, proceeding, deviating, or retarding of activities and thoughts.

Chapter VII. Behavior. How does it come to pass that we ascribe to others experiences similar to those we have ourselves? Since we cannot perceive directly the experiences of other people the usual argument has been that we *infer* the nature of these experiences on the basis of special varieties of association and analogy which have become attached to facial and bodily expressions. Again it is possible to show that this application of the meaning-theory contradicts many important facts. *Gestalttheorie* prefers to defend the thesis that experiences of other people very often are revealed directly in their external behavior. External behavior, when viewed by another person, is a form of sensory organization which, to unprejudiced everyday observation, displays such qualities as hesitation, composure, perseverance, indifference, patience, resilience, diffidence, tenacity, irresolution, serenity, etc. Since these properties of sensory organization seem to correspond to the subjective states of the person who exhibits the behavior it is unnecessary to assume that we can only understand these states by the round-about paths of inference, analogy, and association. If psychology were to limit the properties of the sensory field of vision to local nuances of brightness, chroma, and hue, it would then be difficult indeed to account for the readiness with which we understand behavior. But as soon as the innumerable properties of sensory organization are recognized as given immediately in direct experience the problem acquires happier means of solution.

Chapter VIII. Association. According to the general law of association if two processes, A and B, have occurred frequently together, reactivation of the trace of A will cause the appearance of B in consequence of a bond created between them. In opposition to this view *Gestalttheorie* maintains that A and B can become connected only when they are absorbed as members of a larger whole, only when they are perceived as a totality, only, in other words, when they are *organized*. Hence organization, rather than association of indifferent items, is crucial to the formation of physiological mnemonic traces. Many experiments have shown that mere repetition of items which are not *grouped* or perceived as *related* is of small avail in establishing associative bonds. Where there is no organization association does not occur. When association does occur, as a result of the organization of relative properties of the parts, the physiological

trace acts as a functional whole in which the after-effects of the parts exist as local regions in the single trace. *Gestalt* psychology therefore abandons association as a special and independent theoretical concept.

Chapter IX. Reproduction. Within the total field of experience one object acquires, during the course of time, a unique position with respect to all other objects of experience, *viz.*, the "self." Since the self, as given in direct experience, is related to external events in the same way as these latter are related to each other, the principles of sensory organization already considered apply with equal force to those *Gestalten* in which the self occurs as a functional member. The most common characteristic of such *Gestalten* is their bipolar character or dynamical directedness. The self is directed *to* or *away* from other objects in the total field. The contours of such organizations form an attitude, consisting of one member from which it issues and another toward which it proceeds. Somewhere within the field of these dynamic attitudes must be sought the basis for the persistent selection and exclusion which operates in thought and action. The reproduction of past events during the course of thought is not automatic in the sense that the presence of A serves to reactivate the B that was connected with it, for A has been connected not only with B, but with C, D, E, F, etc. B occurs in the train of thought only when it is an integral part of the dynamic attitude into which the field of experience has been organized at the moment. And when this particular organization is present the "automatic" connections with C, D, E, and F are severed. Reproduction, in other words, is generally restricted to those events which have a *value* with respect to the actual total field and its dynamical development as a functional whole.

Chapter X. Insight. If within the total field of experience all qualities, attitudes, forms, states, properties, etc., were simply given as an indifferently related pattern of items none of which was felt directly to depend upon any other or to determine any other, it would then be gratuitous to speak of the operation of *insight*. To unprejudiced and commonsense observation, however, such a field of experience is a rare occurrence, and constitutes an exception to the rule that an attitude or a state of mind is immediately *felt* as growing directly out of some related event in the field, as when one says that his nervousness is due to the smoke and loud talk in a crowded restaurant. In such a case there exists between the attitude and its

sensory base *ein sachlicher Zusammenhang* which is just as much a matter of direct observation as any red or any reflex. Experience, taken uncritically, abounds in relationships which reveal causal properties. The *raison d'être* of one event is seen as growing naturally out of the characteristics of some other event. The awareness of this determination of one event by another is what is meant by insight.

The above summary is pitifully inadequate to the embarrassment of riches with which each chapter is laden. As the main argument rushes headlong through the book, sparks which light up new hypotheses, suggest new points of view, hint at new facts, are struck off on almost every page. Professor Köhler has not written the book for quick or superficial reading. To come to anything like close grips with the burden of the thesis which *Gestalttheorie* is trying to present, the book must be read slowly and carefully, reread, and then read again. Even those who find themselves unable to agree with the main tenets of *Gestalt* psychology will have difficulty in expounding the basis of their disagreement if the ramifications of Köhler's arguments are not followed closely.

One point of disagreement with *Gestalttheorie* which has found frequent expression relates to Köhler's (and Koffka's) opposition to the interpretations which have been based on certain types of psychological analysis. Much confusion, and at times nebulous thinking, has been produced by this vexed question. The problem has not been treated directly in the present work, but numerous incidental references to it enable one to understand Köhler's present position on the matter. *Gestalttheorie* holds that if some figure in the phenomenal field is experienced as a unitary affair, then no amount of so-called psychological analysis will permit one to state that it is made up of such and such parts. The figure has its own unique formal property, but this property is not compounded of simpler components. To be sure, shifts in *Aufgabe* or predetermination, upon subsequent presentations of the same stimulus, will very likely result in alterations of the character of the figure; but these perceived alterations are each of them *different* figures and have nothing to do with the psychological constitution of the original figure. If, *e.g.*, the musical octave is perceived as a unit, its distinctive character in such a case depends not upon a relationship between psychological parts but upon the organization of an unimembered whole. If, now, on subsequent

presentations of the stimuli c and the c above, first the lower and then the higher c stands out from the background, it is not permissible to conclude that these perceived parts were present in the original whole. The change of character, by a shift of attitude, from the original unitary whole to a bimembered configuration was genuine enough. Only the conclusion that these changes constitute analyzed parts of the original whole is incorrect. The extension of this view, so it seems to me, is the keynote of *Gestalt* doctrine.

Does the severe criticism which Köhler and his colleagues have leveled against certain earlier systems of psychology mean that they reject the products of the particular kind of analysis which these other systems have made use of? Most certainly not! It is at this point, I think, that serious misunderstanding has arisen. One may take exception to the interpretation given a particular fact, but the fact remains whatever the interpretation may be. If the postulates of *Gestalttheorie* were such that the facts from, let us say, the Wundtian point of view had to be thrown into the discard, then *Gestalt* psychology would stand condemned, and justly so, at the very outset. A mass of careful investigation and quantification of sensory process has come out of introspective psychology, and any theory of *Gestalt* or behavior which denied the validity of these observations would put itself in a bad way indeed. But in addition to these observations older introspectionism had certain hypotheses regarding the proper subject-matter of psychology and the manner in which sensations combined to form perceptions, ideas, and thoughts. With the main trend of these hypotheses Köhler is in violent disagreement, but the observations made under the influence of these hypotheses he accepts wholeheartedly. It merely happens that these particular observations interest him less than do those in other directions of investigation.

The importance of *Gestalt* psychology, as I indicated in the beginning, lies to a very considerable degree in its concern with hypothesis and theory. The events which belong within the subject-matter of psychology are in number like the sands of the sea. If a corps of research workers efficiently organized according to the most approved American plan were to observe and catalogue these events it would be a herculean task—and a pointless one. A fact acquires significance in proportion as it throws light upon the degree to which some hypothesis is tenable. Without an hypothesis at least vaguely in mind an investigator runs the risk of working aimlessly, content to

stumble upon this or that novel bit of information, to find a positive correlation here and a negative one there. The final test for scientific truth lies, to be sure, in facts and correlations, but the cause of scientific truth is furthered most by those whose imagination enables them to guess in what direction correlations should be sought. There were thousands of facts which Darwin might have observed. But before he had gone very far he must have been keenly aware of the kind of facts of significance to him and the kind he could afford to ignore. *Gestalt* psychology gives abundant evidence of knowing its own mind with respect to the facts which it can afford to neglect, and in addition, it offers fertile argument to justify the direction in which it proposes to seek new facts.

It so happens that some of the facts in which *Gestalt* psychology is interested lie within the field of behavior and others within the field of introspection, and Köhler has sought to explain how it is that he can accept indiscriminately sets of data which hitherto have often been rigidly pigeon-holed into supposedly different universes of discourse. This explanation carries with it the weight of conviction and will come to be regarded, I think, as the most satisfactory definition of the subject-matter of psychology. No introspectionist nor behaviorist can afford now to condemn his opponent's definition of psychology until he has considered the matter in terms of Köhler's epistemology. But this clarification of point of view, if it were the sole content of Köhler's book, would be largely a negative achievement. The positive contribution of *Gestalttheorie* lies in the new impetus and freshness of outlook it has given, and will undoubtedly continue to give for a long time to come, to the study of mental organization.

By elaborating at some length the rôle of organization in mental life Köhler clarifies the position which *Gestalttheorie* is led to take as a result of its opposition to certain types of analysis. The older view held that introspective analysis reveals sensory process as a simple invariable element of direct experience. Perception was regarded as an integration of sensory elements through fusion and colligation. While not denying that perception at times may reveal such integration *Gestalttheorie* likes to point out that in many cases the supposed integration is an erroneous interpretation of a series of observations made on the same stimulus, and maintains, furthermore, that direct experience is replete with qualities which can neither be looked upon as the joining together of simpler parts nor as the product of modi-

fications and connections built up during past experience. There is, in other words, a wide range of phenomena which belong neither to perception nor to meaning. Köhler is careful to point out the wealth of meaning in experience, but is emphatic in his view that the waste-basket theory of meaning has been the receptacle of altogether too many items thrown there simply because they have not yielded conveniently to sensory description. *Gestalt* psychology offers no alternative to the current theories of meaning, but it does suggest many ways for dealing directly with the manifold varieties of qualities which have hitherto been all too frequently disregarded or even, in some quarters, thrown completely outside the realm of psychology because they were thought to be contaminated with meaning. The new direction which Köhler and his colleagues wish to give to psychology may perhaps be indicated in the following way. Older psychology might have argued that mental life contains 25 per cent simple sensory material, another 25 per cent which is perceptual in nature, and that 50 per cent of it is the product of meaning. *Gestalt* psychology might urge that only 10 per cent is purely sensory, another 10 per cent perceptual, 20 per cent the result of meaning, and that 60 per cent is made up of qualities which attach to extended and segregated wholes. The actual figures, of course, mean nothing. They merely serve to fix in mind the field of psychology to which *Gestalttheorie* ascribes the greatest significance.

It is perhaps only right that I should state at this point that I have been deeply impressed, and possibly too favorably prejudiced, by the main tenets of *Gestalttheorie*. Instead, therefore, of giving voice to maladroit encomiums or betraying the book by a bad defense I shall urge the sceptical reader to turn again to the original text, and shall confine myself to the brief statement of one or two doubts and queries which were raised by the study of Köhler's treatise.

First, a rather minor point. I hope I should be the last person to indulge in carping criticism because an author failed to clutter his pages with learned-looking footnotes. Too many pages on which a thin line or two of text disappear over the top of great masses of *op. cit.*'s and *ibidem*'s and smart corrections of other authors' citations give me sometimes the impression of scholarship gone to seed. But there are times when an occasional reference is badly needed. These times occur rather frequently in Köhler's text, for since much of his material is polemical not a few readers will want to know exactly where to find a statement of the views which he attacks so

vigorously. The footnotes, unfortunately, give no help whatsoever in this respect. Köhler is especially concerned, *e.g.*, to point out what seem to him the weaknesses of certain forms of introspectionism. One might naturally suppose that he had Wundt, or Külpe, or Titchener in mind when developing his opposition. The last two psychologists are not mentioned in the book. The first is referred to once in a footnote without a page reference. One might doubt, furthermore, whether any psychologist of standing among the older introspectionists (and the same would apply to behaviorists) ever committed himself in black and white to the rigidity of doctrine which Köhler imputes to introspectionism. The answer to this criticism is, I think, simple enough. I have no doubt that Köhler is perfectly right in most of the strictures which he levels against introspectionism, but I am not so sure that they apply so much to any single introspectionist as to certain prevailing habits of thought which characterized introspectionism as a school. Even if Köhler had no single psychologist or group of psychologists in mind, he could strengthen his case considerably by citing page references to writers who have expressed views resembling those which he attacks in order that the reader may discover for himself the original sources which, when interpreted too literally, often lead to absurdities in the hands of enthusiastic disciples.

The position adopted by *Gestalttheorie* towards the principle of association, although marvelously salutary by way of fertilizing the soil around the roots of weather-beaten doctrine, cannot be accepted, I believe, until the two supposedly opposing views have been pitted together for the purposes of critical comparison. Köhler's attitude toward association is clear enough: "From our viewpoint, association is given up as a special and independent theoretical concept" (p. 293). I shall venture to suggest that the differences between associationism and *Gestalt* psychology are not great enough to warrant giving up a point of view which, in one form or another, has held its ground in psychological thinking for well over two thousand years. For Aristotle, association was brought about by similarity, contrast, and contiguity. Köhler's concern is primarily with the law of contiguity. He should therefore make it clear that he does not dismiss associationism *en bloc*, but only one particular form under which it has appeared during its long history. Among the English empiricists similarity was given nearly as much serious consideration as contiguity. Passages which expand the view that association of

ideas takes place by way of concordance, likeness, harmony, correspondence, fitness, congruity, attraction, coherence, affinity, agreement, and similarity are numerous indeed. Surely ideas which are thus linked together possess those very properties which define mental organization in the sense in which *Gestalt* psychology uses the term. Here is no association of *indifferent* items. On the contrary, the above phrases expressly denote organization of *relative* properties within a group. With one form of associationism, then, *Gestalt* psychology finds itself in full agreement.

Against the form of associationism which singles out contiguity (and the quantitative laws of frequency) as the decisive factor *Gestalt* psychology makes out a strong case. Contiguity has frequently been handled as though it referred to spatial and temporal abutting of stimulus-objects rather than *experienced* objects. Köhler has shown with crushing effectiveness that whenever this interpretation of contiguity is resorted to it can be blasted by innumerable facts which run counter to it. But it may be permissible to suggest that *Gestalttheorie* is in a conspicuously fit position to correct this dubious interpretation of contiguity and to demonstrate that if association by contiguity is limited to *experienced* objects the principle is in harmony with the doctrine of organization.

The objection to contiguity is frequently expressed by some such illustration as the following. I have entered the front door of my house many times (frequency of repetition) but am quite unable, perhaps, to recall whether there are two or four panels (spatial contiguity). Does not this inability to recall prove that association by frequency and contiguity does not hold? By no means! Whenever I have entered the door my mind has been occupied by anything in the wide world *except* the panels. Hence it is incorrect to speak of contiguity, for the simple reason that phenomenologically the door-panels were nonexistent, and equally beside the point to talk of number of repetitions inasmuch as the first experience has yet to take place. But once let me speculate as to what appearance the door would have if I were to put a knocker on it, and the next time I approach it the spatial contiguity of the panels is very likely to be *perceived* as a definite property of one part of the total field of experience. At that moment, but not until then, the panels assume a relationship towards one another which is appropriately described as one of contiguity. They reveal the characteristics of organization. But *Gestalt* psychology argues that it is organization, not contiguity,

which is basic in the establishment of mental connections. Here I suspect the presence of too nice a verbal subtlety.

If the stream of mental events runs along channels which reveal patterns of one sort or another, organization may be considered an universal property of mind, and contiguity merely one mode of its manifestation. Associationism in singling out contiguity and similarity was concerning itself with those varieties of organization which seem coercive in establishing traces effective for recall. To argue that association must be given up as a theoretical concept is to argue that one of the most striking forms of mental organization is thrown out. And to support the argument by urging that contiguity depends upon organization is like trying to decide whether the universal comes before the particular.

Associationism has shown itself vulnerable at many points. Sixty years ago J. S. Mill felt obliged to make a radical revision of the doctrine of association by frequency. And thirty-five years later the students of Külpe introduced powerful evidence of the inadequacy of association to thought and reasoning. But in spite of these incisions and patchings the ancient body of associationistic doctrine still retains much of its old vitality.

One final query. Through the course of the first three chapters Köhler presents a beautiful analysis of the differences between behaviorism and introspectionism, and a splendid defense of a point of view which would include the data of both these schools and much also which both have neglected because of artificially established boundaries. Direct experience comes back into its own, alive with objects, values, and actions every bit as real psychologically as simple reflexes and sensory processes. But as the argument advances there looms ever larger behind the immediacy of direct experience the mediate constructions of the physicist's "reality." "There is no reason at all," says Köhler, "why the construction of physiological processes directly underlying experience should be impossible, if experience allows us the construction of a physical world outside, which is related to it much less intimately." From this point on, the importance of the underlying physiological processes seems to increase until the suspicion is difficult to avoid that for Köhler direct experience will eventually be for psychology just what it is for physics, merely a sign or symbol from which may be constructed the laws which govern underlying reality. It is one thing to seek for explanations of direct experience in terms of physical concepts

applied to the brain-field, and quite another to search experience for those events which will be of use in throwing light on the ways of nervous action. In the former procedure the nature of direct experience itself is the goal; in the latter, experience is merely the point of departure along the road which leads away from appearances to the stability of physical reality. To which of these alternatives does Professor Köhler subscribe?

CARROLL C. PRATT

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KANTOR, J. R., *An Outline of Social Psychology*. Chicago: Follett, 1929. Pp. xiv+420.

Professor Kantor presents in *An Outline of Social Psychology* a valuable and much needed review and appraisal of the diverse presuppositions found in the literature on the subject. His style might well be called "Kantornese." He brings to the reader a panorama of the various contributions from the special fields of anthropology, biology, sociology, history, etc., betraying a background of reading far in excess of his bibliographical citations. The volume as a whole is an *insight* rather than an *outline*. One lays the book down with a feeling that somehow social psychology may one day become a science.

The author starts out with what seems to the reviewer the first logical step in the development of this science in the making. He disposes of all "mentalistic" psychologies with something less than literary courtesy and centers his inquiry upon the question of the nature of psychological units and their fact-bearing possibilities. We are continually reminded that the unit in social psychology is a historical individual, behaving in any situation in consequence of his previous cultural milieus. Cultural psychology and social psychology are equivalent terms.

By way of definition he submits that "social psychology is the science of conventional reactions to institutional stimuli, and since these phenomena are inevitably connected with aggregates of individuals, the data of social psychology are *ipso facto* connected with groups" (p. 11). His major proposition thus stated, he is in position to avoid the pitfalls that have led so many students of social psychology into theoretical culs-de-sac. One does not need to inquire first whether an individual is behaving in the presence of aggregate or in isolation, to determine the genuineness of socio-psychological

behavior. Kantor finds no term more misleading than the word "group," which was and still is the first thing so many students of social phenomena think about.

"Mob psychology," "crowd psychology," and the like do not qualify as equivalents of social psychology. They are loose expressions carried over without critical analysis from once popular but highly unscientific descriptions of group behavior. The sociologist alone is interested in aggregates *per se*. An individual in isolation may be the center of a socio-psychological fact. He may be regarded as a member of a so-called psychological aggregate or group, only when a common cultural or institutional endowment (acquisition) forms the basis for behavior similar to that of the other members of the group. All socialization theories, therefore, are highly relative, for room must be left for the explanations of the many sorts of variable behavior of individuals, even in the most compact of sociological groups. "Almost always group conduct is a descriptive average of certain actions, such as a grammarian's report of a nation's speech or the historian's account of a typical form of behavior" (pp. 57-58).

The author next (in Part One) outlines the perspective problems of social psychology. He finds a variety of reasons for the present unsatisfactory status of social psychology as a science. These problems are methodological in nature, involving the sorts of presuppositions we are as students willing to accept. They are peculiar to social psychology, first, because of the tendency of the student to confuse social psychological phenomena with certain other facts connected with them (p. 65), and second, because the data of social psychology are intimately connected with one's self, making for prejudicial and misinterpreted accounts from the very beginning. The author reviews in turn the perspective problems from the standpoint of their relations to biology, anthropology, and psychology.

The central consideration of the biological perspective is, of course, the mooted question of heredity, which seems to require a definition every time it is presented as an explanatory principle of behavior. "In its most rigid description, heredity means that we have a condition of stability of the characteristics or traits of organisms during the course of the parent-offspring continuity" (p. 95). "Since heredity factors can only operate through the transmission of actual biological structures and their correlated functions, we find only a slight concomitance of actual biological char-

acteristics with the performance of behavior. . . . One might just as well find a basis for psychological phenomena in the chemical constitution of the acting organism" (p. 97). In brief, cultural conduct, which yields the essential data of social psychology, is independent of biological conditions.

As to the anthropic background of the perspective problems, the author finds nothing illuminating in such stock theories as "psychic unity," "organic whole," "marginal" and "central" group-influences. At the same time he finds that social psychology bears a closer relation to anthropic phenomena than it does to biological facts. His discussion here is essentially a criticism of those unwarranted theories, which have so long cluttered up the literature on the subject.

The most important of the perspective problems are those associated with psychological phenomena. Here the author applies the principles of objective psychology as outlined in his systematic work, "*Principles of Psychology*" (1924-26). For sake of space, reference to this work is here sufficient.

Part Two deals with the data of social psychology: (a) social responses, (b) institutions as cultural stimuli, (c) culturalization, (d) cultural personality, (e) mechanism of institutional development. Under these captions the author presents as many phases of the biographical perspective of a typical cultural being.

In Part Three the author turns to a consideration of collectivities. Collectivities may be fractionalized in a less rigid sense than the planes and currents conception of earlier writers. Again, the moities appear as quantitative variants, for which a figurative alignment in horizontal sections seems appropriate for descriptive convenience. There is, however, a pull or tension away from these sections in the direction of individuals. Into these figures he throws a relief of changing collectivities as conditioned by conservative tendencies and by the rise and disappearance of groups which are duplicated and modified in various ways by interpersonal stimulation and response.

In Part Four humanistic situations are considered from the standpoint of a series of analytical examples. It seems to the reviewer that the author here makes a distinct contribution to the science. Cultural and non-cultural facts are differentiated as a preliminary step in outlining methods of study.

In the final pages an enlightening sketch of the vast possibilities of applied social psychology is set forth, completing the picture of

our present knowledge of social psychology from the dual standpoint of subject-matter and methods for investigating it.

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MURCHISON, CARL, *Social Psychology*. Worcester: Clark Univ. Press, 1929. Pp. x+210.

In the somewhat belligerent opening pages we read that social psychology at present is a futile chaos. Neither the approach by way of the group nor by way of the individual has been fruitful; social psychology is poverty-stricken, and indeed may be said to be at death's door. Resuscitation, Professor Murchison thinks, will come only through a new consideration of the patterns of political and social life, devoid of the sterile hypotheses and presuppositions of social forces, instincts, drives, primacy of the group, or primacy of the individual. "The task of the social psychologist is not to look for instincts or other simple teleological methods of interpreting behavior but to look for the measurable factors of individuals and of communities" (page 189).

The simple fact that individual differences exist is called upon in this volume to sustain considerable burden. Inequality of itself is said to make certain social patterns illusory when not actually absurd, *e.g.*, democracy, socialism, anarchy, bolshevism. All social phenomena seem to the author to be mere by-products of inequality. "A description of the mere facts of inequality is all that can be used in support of the assumption of drives, and is in itself all that is necessary for an adequate description of social phenomena" (page 196).

Individual differences are most apparent in respect to strength, that is, in the ability to dominate. Because of inequality in this direction we have to admit the incompatibility of still other social programs with the facts of human nature, *viz.*, Christianity, social contract, and all utopias. The political philosophies most in accord with the facts of individual differences are those of Bodin and Montesquieu; and in accord with the facts of domination, the philosophies of Hobbes and Machiavelli. The latter "had no organized psychology upon which to base his interpretations of political life, but no political theorist has ever guessed so amazingly well" (page 97).

It is by no means clear to the reviewer how domination derives

automatically from the simple fact of inequality in strength. The mere juxtaposition of a strong man and a weak one has no result unless both are animated with a will to power. Hosts of writers have based their social theories upon domination, but each has had to make a dynamic presupposition in terms of the nature of life, social force, or individual instinct (Darwin, Spencer, Hobbes, Sighele, Le Dantec, etc.) The author is certainly stepping beyond "a description of the mere facts of inequality" and is assuming a drive, when he writes, "There is not the slightest question concerning the certainty with which stronger interests in the community will rule the entire community. No verbal technique of government will ever change the inevitability of such phenomena. As surely as water runs down hill, the stronger interests will rule the weaker interests" (page 202). It does not seem to be possible to write social psychology without a dynamic conception of behavior. If it were possible, the problem would pass into the hands of the sociologist who is ever more adept than the psychologist in the mere description of patterns.

This book is merely a sketch or outline of a point of view. The point of view is original, however loosely it may be worked out. It gives the reader a feeling that the present standard formulations of social psychology are the merest beginning. The use of allusion to the classics, which is a distinguishing feature of the book, serves very well to remind the reader how superficial the field of social psychology may become unless there is a revival of interest in social philosophy.

GORDON W. ALLPORT

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CLARK, ELMER T. *The Psychology of Religious Awakening*. N. Y.: Macmillan, 1929. Pp. 170.

"The records of the present study constitute the largest collection of personal religious experiences ever brought together." There are 2174 cases tabulated, and the data treated in a manner not unlike that employed by Starbuck and other investigators in the era of the questionnaire. Three types of religious awakening are distinguished: the definite crisis (conversion) comprising only about 7 per cent of the cases; the gradual awakening, in which religion dawns by a developmental process unaccompanied by significant upheaval, containing 66 per cent of the cases; and the emotional-

stimulus type of awakening which though essentially gradual yet has some specific event as the beginning of the religious consciousness, in 27 per cent of the cases. Definite crisis is more common among those who have heard stern theology, among those whose religious education has been irregular, among those who are now over forty years of age, and among people from rural environments. Likewise men show definite crisis more frequently than women. Among the denominations Baptists have the largest percentage of cases in this group, then come in order the Methodists, Presbyterians, and lastly the churches which confirm their members.

Although questionnaires were assembled from sixty institutions geographically scattered, the cases are not as representative as the author seems to claim. For the most part only young people are included in the study, and only 1.4 per cent had irreligious home life, 93 per cent attended Sunday School regularly; and four-fifths of the entire group are affiliated with evangelical bodies. Within the selected field studied, however, the results are solid, and definitely demonstrate the decline of old-time conversion, and the creation of a new type of religious attitude in the younger generation.

G. W. A.

MUNRO, THOMAS. *Scientific Method in Æsthetics*. N. Y.: W. W. Norton, 1928. Pp. ix+98.

Skeptical of the alleged ineffability and uniqueness of æsthetic experience, the author subscribes heartily, if in rather general terms, to the naturalistic ideal for æsthetics. He sketches briefly a program of inquiry, not comprehensive, but in respect to many points quite original. Affective states (Santayana's "tertiary qualities") he thinks have thus far eluded æsthetics, but may be made accessible through the study of the language of criticism and personal appreciation. Little mention is made of the concrete achievements of the scientific method in æsthetics up to the present time, but as a felicitous expression of a point of view familiar to most psychologists this little book leaves nothing to be desired.

G. W. A.

PRINCE, MORTON. *Clinical and Experimental Studies in Personality*. Cambridge: Sci-Art, 1929. Pp. xvi+559.

In the preface to this volume, written only eight months before his death, Dr. Prince sketches briefly the growth of interest in

abnormal psychology during the past forty years. Speaking of psychoanalysis he says, "There is much, very much, that every experienced investigator accepts, but this 'much' is not especially Freudian, but is common to dynamic psychology." This statement would apply very well to Prince's own formulations. His theories, like Freud's, have provoked so much interest and, when shorn of their peculiarities, have so many elements of enduring value, that his position as one of the outstanding pioneers in dynamic psychology is forever assured.

It is convenient to have the best and most representative of Dr. Prince's numerous papers gathered into a single volume. The selection, which was made by A. A. Roback, is an excellent one. Twenty-one papers, including some hitherto unpublished, are presented under four headings: problems of psychopathology, problems of personality, problems of the coconscious, problems of consciousness. Since Dr. Prince never systematized his thought in any comprehensive fashion, the present volume, through its very diversity, gives a better understanding of the reach and application of his theories than does any other single volume from his pen.

G. W. A.

MUKERJEE, R., and SEN-GUPTA, N. N. *Introduction to Social Psychology*. N. Y.: D. C. Heath & Co., 1928. Pp. xv+304.

This is an elementary text covering the general subject of social psychology. The treatment is inclusive but is descriptive rather than explanatory, with the stress on the group in all its aspects. The individual, it is true, is suggested as an explanatory unit, but this analysis is not carried very far. There is frequent use of psychoanalytic terminology and principles, including a chapter on "Social Neuroses," and a strong insistence on the social importance of motor responses; but in general the tone of the book is sociological rather than psychological. It is regrettable that the authors did not include more material from Indian sources. Each chapter has a good bibliography and selected topics for class work. The index is unusually thorough. While the book is stimulating at times, it does little to advance the subject, and we may echo Yerkes in his introduction and "hope that even such an excellent work as our authors have prepared may soon be out of date."

W. A. HUNT

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